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NOTICE OF ALLOWANCE AND FEE(S) DUE

21171 7590 06/08/2004

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

NGUYEN, MINH DIEU T

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 06/08/2004

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/725,674 | 11/30/2000 | Hideyuki Hirano | 1405.1029/JDH | 1581 |

TITLE OF INVENTION: METHOD FOR FACILITATING LEGITIMATE USE OF DIGITAL CONTENT

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1330 | \$300 | \$1630 | 09/08/2004 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status.
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail**

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

21171 7590 06/08/2004

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

| |
|--------------------|
| (Depositor's name) |
| (Signature) |
| (Date) |

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| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|---------------------|----------|----------------|
| NGUYEN, MINH DIEU T | 2137 | 713-176000 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

| | |
|---|-------|
| 1 | _____ |
| 2 | _____ |
| 3 | _____ |

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
☐ Publication Fee
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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| STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | NGUYEN, MINH DIEU T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2137 | 5 |
| DATE MAILED: 06/08/2004 | | | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 860 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 860 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability

Application No.

09/725,674

Examiner

Minh Dieu Nguyen

Applicant(s)

HIRANO ET AL.

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Preliminary Amendment A dated November 30, 2000.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 30 November 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Allowable Subject Matter

1. Claims 1-17 are allowed.
2. The following is an examiner's statement of reasons for allowance:

As recited in claims 1 and 14-15, a data management method for distributing digital content in which annex information is visibly arranged, the data management method comprising:

- i) a step of duplicating as a discrete data unit a part of said digital content including a position where said annex information is visibly arranged, and encrypting the discrete data unit to create an encrypted discrete data unit;
- ii) a step of embedding within said digital content as invisible information image-compositing information, relating to position and size for arranging said annex information in said digital content, and authorization information, including encryption key information by which said discrete data unit is encrypted, to create an authorization information-added data unit;
- iii) a step of visibly arranging said annex information in a position corresponding to the discrete data unit for said authorization information-added data unit, to create an annex information--added data unit; and
- iv) a step of creating and distributing composite data composited from said encrypted discrete data unit and said annex information-added data unit.

The prior arts:

a) Saito (US 6,182,218) discloses a system for managing digital content, specifically for managing a copyright of digital content claiming the copyright and for securing secrecy of digital content. The digital content management program is embedded to an operating system of a user apparatus as a micro kernel, a watch program or a watch command which is linked to the digital content management program is transmitted to the user apparatus by using a network or data broadcasting, and thereby, the illegitimate usage of the digital content is watched. Its system does not anticipate a data management method for distributing digital content in which annex information is visibly arranged, especially part i) and ii).

b) Kita et al., (US 6,707,927) discloses a steganographic system, method, program and storage medium which are useful for the case in which digital contents such as images are distributed and circulated through an internet. This steganographic system which can dispense with an original image during extraction of watermark by determining a position at which an optimum space dependent physical quantity is embedded as a watermark complying with an image such that the picture quality can be prevented from being deteriorated, embedding watermark information in the image, generating information such as watermark embedding position information and receiving a watermark embedded image and watermark embedded position information to extract watermark information. Its system does not anticipate a data management

method for distributing digital content in which annex information is visibly arranged, especially part i) and ii).

c) Kobayashi et al., (US 6,490,681) discloses an electronic watermarking system that impartially performs the deletion of a visible mark and the embedding of an invisible mark. Since the deletion of the visible mark and the embedding of the invisible mark are not performed sequentially but in parallel, even when a memory snapshot is taken during the process, it is difficult to acquire original image data where neither a visible mark nor an invisible mark is embedded. Furthermore, in a process for deleting a visible mark and embedding an invisible mark, an invisible mark is embedded in an area where a visible mark was embedded. Therefore, even when images are compared before and after the visible mark is deleted, it is difficult to infer from the results that an invisible mark has been newly embedded. Its system does not anticipate a data management method for distributing digital content in which annex information is visibly arranged, especially part i) and ii).

As recited in claims 16 and 17, a recording medium on which is recorded a program for an image-restoration method comprising:

- i) a step of separating an authorization information added data unit and an encrypted discrete data unit from distributed composite data;
- ii) a step of extracting image-compositing information and authorization information from the separated authorization information-added data unit;

- iii) a step of using the extracted authorization information to restore the encryption key by which said encrypted discrete data unit is encrypted;
- iv) a step of using the restored encryption key to restore said encrypted discrete data unit into the discrete data unit; and
- v) a step of compositing, based on said image compositing information, the restored discrete data unit into image data for said authorization information-added data unit.

The prior arts:

a) Saito (US 6,182,218) discloses a system for distributing a public key by means of a network. The public key is put in a public key distribution screen to be distributed. On the public key distribution screen, image data is entered, wherein information on the owner of the public key is added as an invisible electronic watermark. When the user presents the public key distribution screen to a public key management center, the public key management center checks the validity of the public key owner by the invisible electronic watermark. Its system does not anticipate a data management method of image restoration especially in which comprising parts i), iii), iv) and v).

b) Kita et al., (US 6,707,927) discloses a method of extracting a watermark, without resort to an original image, from an image which is minimized in deterioration due to watermark embedding by using watermark embedding position information alone, a set of position information and threshold function. Its system does not

anticipate a data management method of image restoration especially in which comprising parts i-iv).

c) Kobayashi et al., (US 6,490,681) discloses an electronic watermarking system that impartially performs the deletion of a visible mark and the embedding of an invisible mark. As a result, both the efficient management of contents and the establishment of ownership can be ensured. Its system does not anticipate a data management method of image restoration especially in which comprising parts i-v).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 703-305-9727. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Morse can be reached on 703-308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/725,674

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Art Unit: 2137

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Minh Dieu Nguyen
Examiner
Art Unit 2137

non
mdn
5/25/04

Gregory Morse
GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100